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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,972

07/25/2003

Jon L. Howell

CH2832USCIP

3983

23906

7590

03/21/2006

E I DU PONT DE NEMOURS AND COMPANY
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WILMINGTON, DE 19805

EXAMINER

PRICE, ELVIS O

ART UNIT

PAPER NUMBER

1621

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,972

Applicant(s)

HOWELL ET AL

Examiner

Elvis O. Price

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-27 is/are rejected.
- 7) ☒ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/25/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 13-28 are pending in the application.

Claim Objections

Claim 28 is objected to because of the following informalities: Claim 28 appears to be a dependent claim, however, there is no dependent "claim number" recitation in claim 28. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama et al. {US Pat. 5,288,376}, in view of Fukaya et al. {Journal of Fluorine Chemistry, 83, 1997, pp. 117-123}.

Applicants claim, inter alia, a process comprising contacting (1) a perfluoropolyether acid fluoride with a metal bromide or metal iodide or (2) heating a

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perfluoropolyether secondary halide, each under a condition sufficient to effect the production of a prefluoropolyether comprising at least one bromine or iodine in the primary position of one or more end groups of the perfluoropolyether.

Oyama et al. teach a process for the preparation of perfluoropolyether iodides comprising contacting a perfluoropolyether acid fluoride with a metal iodide (lithium iodide) to produce the perfluoropolyether iodide (see Cols. 3, 4 and the Example). The difference between what is presently claimed and what is taught by Oyama et al., is that Oyama et al. is concerned with preparing perfluoropolyether iodides, wherein the iodide atom is in the secondary position of the end group of the polyfluoropolyether.

Fukaya et al. teach a method for preparing a perfluoropolyether iodide (perfluoro(2-propoxyethyl)iodide), wherein the iodide atom is primary to the perfluoropolyether, comprising reacting a perfluoroether acid fluoride with lithium iodide (see General procedure 3.17).

It would have been prima facie obvious to one having ordinary skill in the art, in view of the cited references, to arrive at the presently claimed invention, because Oyama et al. teach a similar process for preparing a perfluoropolyether iodide wherein a perfluoropolyether acid fluoride is contacted with a metal iodide to form a perfluoropoly ether iodide and Fukaya et al. teach that a perfluoropolyether iodide, wherein the iodide atom is in a primary position to the end group of the perfluoropolyether, can be prepared by performing the same material reaction as presently claimed.

One having ordinary skill in art, desiring to prepare primary perfluoropolyether iodides, which could be utilized as lubricants and/or surfactants, would have been

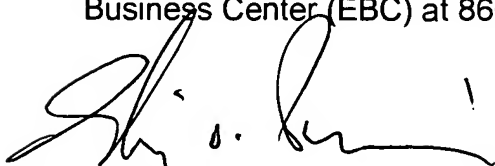
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motivated (in view of Fukaya et al.) to start out with a perfluoropolyether acid fluoride substrate, having the acid fluoride moiety in a primary position on the end group of the perfluoropolyether, while performing the process taught by Oyama et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvis O. Price whose telephone number is 571 272-0644. The examiner can normally be reached on 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Elvis O. Price', with a stylized flourish at the end.

Elvis O. Price